been a controlled item. The level of controls differ from country to country. For countrise which are non-signatories to the nuclear non-proliferation treaty, computers above a certain threshold can be exported only after a license is obtained from the US Government. India is included in this category.

(b) The matter has been taken up with the Government of USA.

(c) Since high performance computers will be subject to case by case licensing, there will be delays in procurement.

(d) and (e) The import of items of high technology including computers are undertaken under the provisions of the Indo-US Memorandum of Understanding signed in 1984. Government are pursuing proposals for procurement of computers from the US under this agreement.

Visit of Israeli team to India

*439. SHRIMATI VEENA VERMA.
SHRI MURLIDHAR CHANDRAKANT BHANDARE:

Will the PRIME MINISTER be pleased to state:

(a) whether an Israeli team led by the Dy. Director General, Foreign Affairs of Israel, Mr. Moshe Yaga lately visited New Delhi, to identify areas of cooperation between the two countries;

(b) if so, what areas were identified as a result of the talks; and

(c) what steps are proposed to be taken in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRI EDUARDO FALEIRO): (a) Yes, Sir. The Israeli official had visited India in March 1992, to discuss the broad framework if future political and economic bilateral relations.

(b) Among the areas identified as mutualy beneficial for cooperation were: agriculture, science & technology, culture, civil aviation, tourism and trade & industry.

(c) Visits of delegations in the fields of civil aviation, tourism and agriculture have taken place to draw up programmes of cooperaiton in each of the areas.

Expenditure sent to Antartica

*440. SHRI KRISHAN LAL SHARMA: Will the PRIME MINISTER be pleased to state:

(a) the number of expeditions sent to Antarctica for research during the last two years;

(b) the details of research work carried out by these expeditions; and

(c) the expenditure incurred on each of the expeditions during the period?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARAMANGALAM): (a) During the last two years *i.e.* 1990-91 and 1991-92 two scientific expeditions were sent to Antarctica.

(b) Details of scientific work done are given in the Statement (*See* below)

(c) The expenditure incurred is given below:

1990-91 . .	Rs. 12·34 crores
1991-92 . .	Rs. 13·00 crores

Statement

Details of the Scientific Work carried out in the Tenth and Eleventh Antarctica Expeditions

Scientific Objectives	*Accomplishments*
TENTH EXPEDITION	
(i) Continuation of the on going programmes on geology to map further areas in the Wohlthat region beyond Hamboldt and Petermann. Establishment of geodetic control points for mapping of the area.	(a) Geological mapping in South Hamboldt region covering approximately 1000 sq. km. was completed.
	(b) Survey of the Schirmacher ranges and the adjoining areas to establish geodetic control points using geographic positioning system, G.P.S. receivers was undertaken. 16 ground control points were established.
	(c) Several rock samples were collected for laboratory analysis.
(ii) Continuation of work on atmospheric sciences, including ozone measurements.	(a) Three-hourly synoptic observations were taken en route.
	(b) Five ozone sonde ascents were undertaken.
	(c) SODAR experiments were initiated and acoustic sounding data recorded.
	(d) Turbidity measurements using sun photometer were undertaken.
	(e) Air samples collected for laboratory analysis.
	(f) Automatic weather station established after study of planetary boundary layer.
(iii) Biological programme to continue including the study, structure, function and colonisation of microbial flora in the melt water streams of Schirmacher oasis.	(a) Collection of samples onroute to Antarctica and in Antarctic polyna for phytoplankton counts, chlorophyll pegments and bacterial counts. Samples in fresh water lake were also undertaken.
	(b) Study of nitrogen fixing blue green algae continued.
(iv) Initiation of the studies in Polar medicines and observation of of human adaptation to extreme cold and isolation. Study on environmental physiology.	Studies initiated and data on physiological parameters collected.
ELEVENEH EXPEDITION	
(i) Geological mapping to extend to Weyprecht and Payer mountains so as to complete the entire Wohlthat ranges.	The Weyprecht and Payer mountains were covered. Rock samples were collected from this region for laboratory analysis.

Scientific Objectives	*Accomplishments*
(ii) Biological studies to continue and applicability of biofertiliser in hydroponic systems, making use of green house chamber.	Biological studies enroute to Antarctica, in the polyna and in the Antarctic lake continued. Green house established and hydroponic system also successfully tested. Cucumber, green chillies & tomatoes were grown.
(iii) Continuation of atmospheric and magnetospheric studies including modelling of atmospheric boundary layer. Mapping of atmospheric strata including Sound Detection and Ranging system (SODAR).	SODAR experiments successfully continued. Study of ozone layer also continued. The meteorological parameters for weather forecasting and hourly synoptic observations continued.
(iv) Establishment of three-axis microbarograph to record direction and speed of atmospheric disturbances in the lower planetary boundary layer.	Successfully established.
(v) Establishement of geomagnetic observatory at Dakshin Gangotri, Maitri and Wohlthat.	Successfully established.
(vi) Environmental physiology and psychological studies and the study of the behavioural changes to psychlogical circadain rhythm alternations in the extreme Antarctic conditions.	Various physiological and psychological data collected for laboratory analysis.

Implementation of zinconium titanium and magnet plant

3070 SHRI S. MADHAVAN: Will the PRIME MINISTER be pleased to state:

(a) what steps have been taken to implement the zirconium sponge plant at Palayakayal in Tamil Nadu; and

(b) what are the reasons for delay in completing the plant complex consisting of titanium sponge plant and magnesium plant?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARAMANGALAM): (a) In respect of the Zirconium Sponge Plant, all preliminary site and project related work like acquisition of land, environment clearance, arrangement for power and water has been completed. The design of the industrial complex has also been taken up with the consultants.

(b) There is no delay in execution of these plants. Work is proceeding according to plan.

Food irradiation technology

3071. SHRI B. K. HARIPRASAD: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that as per recent press reports (AEC) Atomic Energy Commission propose to promote food irradiation technology to cover many commonly sed food items both for home and exports and, if so, the details thereof

(b) whether Government are aware that Australia has benned food irradiation recently as also New Zealand and several other contries;

(c) whether Government are aware of the stiff consumer resistance in our export markets against food irradiation;